

**CPC****COOPERATIVE PATENT CLASSIFICATION****D10B****INDEXING SCHEME ASSOCIATED WITH SUBLASSES OF SECTION D, RELATING TO TEXTILES****NOTE**

This subclass constitutes a scheme for indexing only.

The indexing codes of this subclass, relating to the chemical constitution of the fibrous materials, are to be associated with groups of section D, with the exception of those of subclass D06M, as far as these groups themselves do not give information about the chemical nature of the fibres.

In a number of fields, the indexing codes relating to the chemical constitution of the fibrous materials are not allotted to documents having an abstract in which the chemical constitution is clearly stated, e.g. if the abstract mentions "polyamide", code [D10B 2331/021](#) is not allotted.

Blends of fibres are indexed according to each constituent fibre.

**D10B 2101/00****Inorganic fibres**

- D10B 2101/02 . based on oxides or oxide ceramics, e.g. silicates
- D10B 2101/04 .. Asbestos
- D10B 2101/06 .. Glass
- D10B 2101/08 .. Ceramic
- D10B 2101/10 . based on non-oxides other than metals
- D10B 2101/12 .. Carbon; Pitch
- D10B 2101/122 ... Nano-carbons
- D10B 2101/14 .. Carbides; Nitrides; Silicides; Borides
- D10B 2101/16 ... Silicon carbide
- D10B 2101/20 . Metallic fibres

**D10B 2201/00****Cellulose-based fibres, e.g. vegetable fibres**

- D10B 2201/01 . Natural vegetable fibres
- D10B 2201/02 .. Cotton
- D10B 2201/04 .. Linen
- D10B 2201/06 .. Jute
- D10B 2201/08 .. Ramie

- D10B 2201/10 .. Bamboo
- D10B 2201/20 . Cellulose-derived artificial fibres
- D10B 2201/22 .. made from cellulose solutions
- D10B 2201/24 ... Viscose
- D10B 2201/26 .. Nitrocellulose
- D10B 2201/28 .. Cellulose esters or ethers, e.g. cellulose acetate
- D10B 2201/30 ... Ethers, e.g. CMC

**D10B 2211/00 Protein-based fibres, e.g. animal fibres**

- D10B 2211/01 . Natural animal fibres, e.g. keratin fibres
- D10B 2211/02 .. Wool
- D10B 2211/04 .. Silk
- D10B 2211/06 .. Collagen fibres
- D10B 2211/20 . Protein-derived artificial fibres
- D10B 2211/22 .. Fibroin
- D10B 2211/24 .. Casein
- D10B 2211/26 .. Globulin, e.g. groundnut protein

**D10B 2321/00 Fibres made from polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds**

- D10B 2321/02 . polyolefins
- D10B 2321/021 .. polyethylene
- D10B 2321/0211 ... high-strength or high-molecular-weight polyethylene, e.g. dyneema, spectra
- D10B 2321/022 .. polypropylene
- D10B 2321/04 . polymers of halogenated hydrocarbons
- D10B 2321/041 .. polyvinyl chloride or polyvinylidene chloride
- D10B 2321/042 .. polymers of fluorinated hydrocarbons, e.g. polytetrafluoroethene (PTFE)
- D10B 2321/06 . polymers of unsaturated alcohols, e.g. polyvinyl alcohol, or of their acetals or ketals
- D10B 2321/08 . polymers of unsaturated carboxylic acids or unsaturated organic esters, e.g. polyacrylic esters, polyvinyl acetate
- D10B 2321/10 . polymers of unsaturated nitriles, e.g. polyacrylonitrile, polyvinylidene cyanide
- D10B 2321/101 .. modacrylic
- D10B 2321/12 . polymers of cyclic compounds with one carbon-to-carbon double bond in the side chain
- D10B 2321/121 .. polystyrene

**D10B 2331/00**      **Fibres made from polymers obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds, e.g. polycondensation products**

- D10B 2331/02      . polyamides ([D10B 2331/08](#) takes precedence)
- D10B 2331/021    .. aromatic polyamides, e.g. aramides
- D10B 2331/04      . polyesters, e.g. polyethylene terephthalate (PET)
- D10B 2331/041    .. derived from hydroxy-carboxylic acids, e.g. lactones
- D10B 2331/042    .. aromatic polyesters, e.g. vectran
- D10B 2331/06      . polyethers
- D10B 2331/061    .. polyetherketones, polyetheretherketones, e.g. PEEK
- D10B 2331/08      . polyamino acids or polypeptides
- D10B 2331/10      . polyurethanes
- D10B 2331/12      . polyureas
- D10B 2331/14      . polycondensates of cyclic compounds, e.g. polyimides, polybenzimidazoles
- D10B 2331/30      . polycondensation products not covered by indexing codes [D10B 2331/02](#) to [D10B 2331/14](#)
- D10B 2331/301    .. polyarylene sulfides, e.g. polyphenylenesulfide

**D10B 2401/00**      **Physical properties**

- D10B 2401/02      . Moisture-responsive characteristics
- D10B 2401/021    .. hydrophobic
- D10B 2401/022    .. hydrophilic
- D10B 2401/024    .. soluble
- D10B 2401/04      . Heat-responsive characteristics
- D10B 2401/041    .. thermoplastic; thermosetting
- D10B 2401/046    .. Shape recovering or form memory
- D10B 2401/06      . Load-responsive characteristics
- D10B 2401/061    .. elastic
- D10B 2401/062    .. stiff, shape retention
- D10B 2401/063    .. high strength
- D10B 2401/08      . foamed
- D10B 2401/10      . porous
- D10B 2401/12      . biodegradable

- D10B 2401/13 . anti-allergenic or anti-bacterial
- D10B 2401/14 . Dyeability
- D10B 2401/16 . antistatic; conductive
- D10B 2401/18 . including electronic components
- D10B 2401/20 . optical
- D10B 2401/22 . protective against sunlight or UV radiation

#### **D10B 2403/00 Details of fabric structure established in the fabric forming process**

- D10B 2403/01 . Surface features
  - D10B 2403/011 .. Dissimilar front and back faces
    - D10B 2403/0111 ... One hairy surface, e.g. napped or raised (for pile fabrics [D03D 27/00](#), [D04B 1/02](#), [D04B 21/02](#))
    - D10B 2403/0112 ... One smooth surface, e.g. laminated or coated
    - D10B 2403/0113 ... One surface including hollow piping or integrated straps, e.g. for inserts or mountings
    - D10B 2403/0114 ... with one or more yarns appearing predominantly on one face, e.g. plated or paralleled yarns (for pile fabrics [D03D 27/00](#), [D04B 1/02](#), [D04B 21/02](#); for intarsia fabrics [D04B 1/126](#))
  - D10B 2403/012 .. Alike front and back faces
    - D10B 2403/0121 ... Two hairy surfaces, e.g. napped or raised (for pile fabrics [D03D 27/00](#), [D04B 1/02](#), [D04B 21/02](#))
    - D10B 2403/0122 ... Smooth surfaces, e.g. laminated or coated
    - D10B 2403/0123 ... Both surfaces including hollow piping or integrated straps, e.g. for inserts or mountings
- D10B 2403/02 . Cross-sectional features (for three-dimensional features [D10B 2403/033](#))
  - D10B 2403/021 .. Lofty fabric with equidistantly spaced front and back plies, e.g. spacer fabrics
    - D10B 2403/0211 ... with corrugated plies
    - D10B 2403/0212 ... with baggy or puckered plies
    - D10B 2403/0213 ... with apertures, e.g. with one or more mesh fabric plies
  - D10B 2403/022 .. Lofty fabric with variably spaced front and back plies, e.g. spacer fabrics
    - D10B 2403/0221 ... with at least one corrugated ply
    - D10B 2403/0222 ... with at least one baggy or puckered ply
    - D10B 2403/0223 ... with apertures, e.g. with one or more mesh fabric plies
  - D10B 2403/023 .. Fabric with at least two, predominantly unlinked, knitted or woven plies interlaced with each other at spaced locations or linked to a common internal co-extensive yarn system
    - D10B 2403/0231 ... including contracting yarn, e.g. blister fabrics
  - D10B 2403/024 .. Fabric incorporating additional compounds
    - D10B 2403/0241 ... enhancing mechanical properties

- D10B 2403/02411 . . . . with a single array of unbent yarn, e.g. unidirectional reinforcement fabrics
- D10B 2403/02412 . . . . including several arrays of unbent yarn, e.g. multiaxial fabrics
- D10B 2403/0242 . . . enhancing chemical properties
- D10B 2403/02421 . . . . containing particulate matter, e.g. powder or granulate
- D10B 2403/0243 . . . enhancing functional properties
- D10B 2403/02431 . . . . with electronic components, e.g. sensors or switches
  
- D10B 2403/03 . Shape features
- D10B 2403/031 .. Narrow fabric of constant width
- D10B 2403/0311 . . . Small thickness fabric, e.g. ribbons, tapes or straps
- D10B 2403/0312 . . . Bulk fabric, e.g. belts
- D10B 2403/032 .. Flat fabric of variable width, e.g. including one or more fashioned panels
- D10B 2403/033 .. Three dimensional fabric, e.g. forming or comprising cavities in or protrusions from the basic planar configuration, or deviations from the cylindrical shape as generally imposed by the fabric forming process
- D10B 2403/0331 . . . with one or more convex or concave portions of limited extension, e.g. domes or pouches
- D10B 2403/0332 . . . with gussets folding into three dimensional shape, e.g. seat covers
- D10B 2403/0333 . . . with tubular portions of variable diameter or distinct axial orientation

#### **D10B 2501/00      Wearing apparel**

- D10B 2501/02 . Underwear
- D10B 2501/021 .. Hosiery; Panti-hose
  
- D10B 2501/04 . Outerwear; Protective garments
- D10B 2501/041 .. Gloves
- D10B 2501/042 .. Headwear
- D10B 2501/043 .. Footwear
- D10B 2501/044 .. Fur garments; Garments of fur substitutes
- D10B 2501/045 .. Neckties
  
- D10B 2501/06 . Details of garments
- D10B 2501/061 .. Piped openings (pockets)
- D10B 2501/062 .. Buttonholes
- D10B 2501/063 .. Fasteners
- D10B 2501/0631 . . . Slide fasteners
- D10B 2501/0632 . . . of the touch-and-close type

#### **D10B 2503/00      Domestic or personal**

- D10B 2503/02 . Curtains
- D10B 2503/03 . Inside roller shades or blinds

- D10B 2503/04 . Floor or wall coverings; Carpets
- D10B 2503/041 .. Carpet backings
- D10B 2503/042 ... Primary backings for tufted carpets
  
- D10B 2503/06 . Bed linen
- D10B 2503/062 .. Fitted bedsheets
  
- D10B 2503/08 . Wigs
  
- D10B 2503/10 . Umbrellas
  
- D10B 2505/00 Industrial**
  
- D10B 2505/02 . Reinforcing materials; Prepregs
- D10B 2505/022 .. for tyres
  
- D10B 2505/04 . Filters
  
- D10B 2505/06 . Packings, gaskets, seals
  
- D10B 2505/08 . Upholstery, mattresses
  
- D10B 2505/10 . Packaging, e.g. bags
  
- D10B 2505/12 . Vehicles ([D10B 2505/08](#) takes precedence)
- D10B 2505/122 .. Safety belts
- D10B 2505/124 .. Air bags
  
- D10B 2505/18 . Outdoor fabrics, e.g. tents, tarpaulins ([D10B 2507/00](#) takes precedence)
  
- D10B 2505/20 . for civil engineering, e.g. geotextiles
- D10B 2505/202 .. Artificial grass
- D10B 2505/204 .. Geotextiles
  
- D10B 2507/00 Sport; Military**
  
- D10B 2507/02 . Nets
  
- D10B 2507/04 . Sails
  
- D10B 2507/06 . Parachutes
  
- D10B 2507/08 . Balls
  
- D10B 2507/10 . Balloons
  
- D10B 2509/00 Medical; Hygiene**

- D10B 2509/02 . Bandages, dressings or absorbent pads
- D10B 2509/022 . . Wound dressings
- D10B 2509/024 . . Stiffening bandages, e.g. with plaster of Paris
- D10B 2509/026 . . Absorbent pads; Tampons; Laundry; Towels
- D10B 2509/028 . . Elastic support stockings or elastic bandages
  
- D10B 2509/04 . Sutures
  
- D10B 2509/06 . Vascular grafts; stents
  
- D10B 2509/08 . Hernia repair mesh